CLAIM AMENDMENTS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of the Claims:

1. (Currently Amended) A network management connectivity verification framework comprising:

a connectivity verification server to perform ~~that performs~~ unattended connectivity verification jobs; and

a connectivity verification application ~~for~~ to:

~~defining~~ define connectivity verification jobs capable of verifying connectivity in the network relating to at least Layer-2 and Layer 3 objects within a given containment hierarchy for the network,

~~configuring~~ control the connectivity verification server to perform the defined connectivity verification jobs, wherein the performing generates at least one connectivity result ~~accordingly~~,

~~displaying~~ display the connectivity verification results,

receive a user-input specification of ~~specifying, by a user,~~ at least one connectivity verification threshold ~~for comparison to the connectivity verification results~~; ~~and~~

compare the connectivity verification results to the specified connectivity verification thresholds.

generate an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold,

identify Layer-2 and Layer-3 objects within the containment hierarchy affected by the verification results associated with the alarm, and

display the identified ~~displaying and highlighting~~ Layer-2 and Layer-3 objects~~affected by an alarm~~.

2. (Currently Amended) ~~A~~ The connectivity verification framework ~~claimed in~~ of claim 1, wherein the connectivity verification jobs are scheduled and the connectivity verification server performs scheduled connectivity verification.

3. (Currently Amended) ~~A~~ The connectivity verification framework ~~claimed in~~ of claim 1, wherein the connectivity verification application further provides a display of connectivity verification results.

4. (Currently Amended) ~~A~~ The connectivity verification framework ~~claimed in~~ of claim 1, wherein the results of each connectivity verification job may be compared against a connectivity profile, a deviation from the connectivity profile being used to raise an alarm.

5. (Currently Amended) ~~A~~ The connectivity verification framework ~~claimed in~~ of claim 3,

wherein the connectivity verification results, including alarm information, are further used to generate a network map displaying selected connectivity verification results.

6. (Currently Amended) A method of creating a network connectivity verification test, comprising the following steps ~~of~~:

defining a connectivity verification job capable of verifying connectivity in the network relating to at least Layer-2 and Layer 3 objects within a given containment hierarchy for the network;

controlling ~~configuring~~ a connectivity verification server to perform the connectivity verification job wherein the performing generates at least one connectivity result;

displaying the connectivity verification results;

receiving a user-input specification of ~~specifying, by a user,~~ at least one connectivity verification threshold ~~for comparison to the connectivity verification results~~; ~~and~~

comparing the connectivity verification results to the specified connectivity verification threshold;

generating an alarm when the comparison shows that at least one of the connectivity verification results has reached the specified connectivity verification threshold;

identifying Layer-2 and Layer-3 objects within the containment hierarchy affected by the verification results associated with the alarm; and

displaying the identified ~~displaying and highlighting~~ Layer-2 and Layer-3 objects ~~affected by an alarm~~.

7. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 6, wherein defining the connectivity verification job further comprises the following steps ~~of~~:

selecting via an NMS user interface, a pair of source and destination IP objects between which connectivity is to be verified; and

specifying a connectivity verification schedule.

8. (Canceled).

9. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 6, wherein the step of receiving a user-input specification ~~specifying the at least one connectivity verification threshold~~ further comprises the step of specifying a threshold for at least one of round trip delay, jitter, and packet loss.

10. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 7,

wherein the step of selecting IP objects selects IP objects from a group comprising ~~a selected IP object include one~~ at least one of a router, an IP interface, and an IP address.

11. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 7,

wherein the step of selecting IP objects selects pairs of IP objects from a group comprising ~~the pair of IP objects is selected selecting~~ at least one of an ~~IP~~ Internet Protocol (IP) link, ~~an LSP~~ a Label Switched Path (LSP), and a ~~VPN~~ Virtual Private Network (VPN).

12. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 6,

wherein the step of defining the connectivity verification job further comprises ~~a step of~~ the following step:

configuring a connectivity verification parameter ~~including~~ from a group comprising at least one of a number of ping commands to issue, a ping packet size, a ping data fill pattern, a time to wait for response, and a type of service.

13. (Currently Amended) The method of creating ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 6,

wherein the step of defining the connectivity verification job further comprises ~~a step of~~ the following step:

configuring a connectivity verification parameter ~~including~~ from a group comprising at least one of a number of traceroute commands to issue, a traceroute packet size, a traceroute packet data fill pattern, a time to wait for response, and a type of service.

14. (Currently Amended) A method of performing a network connectivity verification test in a network management context comprising the following steps ~~of~~:

scheduling a connectivity verification process, the process capable of verifying connectivity in the network relating to at least Layer-2 and Layer 3 objects within a given containment hierarchy for the network;

receiving a user-input specification of at least one verification threshold;

performing the scheduled connectivity verification to generate a connectivity verification result;

comparing a connectivity verification result with the user-specified~~a~~ connectivity verification threshold~~, said the connectivity verification threshold specified by a user~~;

generating ~~raising~~ an alarm ~~if~~ when the comparison shows that the connectivity verification result has reached the specified connectivity verification threshold; ~~and~~

identifying Layer-2 and Layer-3 objects within the containment hierarchy affected by the verification results associated with the alarm; and

displaying the identified ~~displaying and highlighting~~ Layer-2 and Layer-3 objects~~affected by an alarm~~.

15. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 14, further comprising ~~a step of~~ the following step:

storing a connectivity verification job on a computer readable medium for subsequent access and execution.

16. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 14, further comprising ~~a step of~~ the following step:

~~highlighting~~ displaying at least one IP object based on one of a connectivity verification job and a connectivity verification result.

17. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 16,

wherein ~~a highlighted~~ the displayed object is one of an OSI Layer 2 and an OSI Layer 3 object.

18. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 14,

wherein the step of performing scheduled connectivity verification further comprises ~~a step of~~ the following step:

periodically executing connectivity verification tests.

19. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 14,

wherein the step of performing scheduled connectivity verification further comprises ~~a step of~~ the following step:

issuing at least one of a ping command and a traceroute command.

20. (Currently Amended) The method of performing ~~a~~ the network connectivity verification test ~~claimed in~~ of claim 14, further comprising ~~a step of~~ the following step:

storing historical connectivity verification results on a computer readable medium for subsequent access.